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12HAY99 E446313-1 C0028E /7700 0.00 - 9910892.0 an ext

THE PATENT OFFICE

The Patent Office

Cardiff Road Newport Gwent NP9 1RH

Your reference

WJ/ADC/jdb/P1398

2. Patent application number (The Patent Office will fill in this part) 11 MAY 1999

9910892.0

Full name, address and postcode of the or of

each applicant (underline all surnames)

Patents ADP number (if you know it)

If the applicant is a corporate body, give the country/state of its incorporation

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Title of the invention

IMPROVEMENTS IN AND RELATING TO TILING

Name of your agent (if you have one)

"Address for service" in the United Kingdom to which all correspondence should be sent (including the postcode)

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2253001

Patents ADP number (if you know it)

6. If you are declaring priority from one or more earlier patent applications, give the country and the date of filing of the or of each of these earlier applications and (if you know it) the or each application number

Country

Priority application number (if you know it)

Date of filing (day / month / year)

N/A

If this application is divided or otherwise derived from an earlier UK application, give the number and the filing date of the earlier application

Number of earlier application

Date of filing (day / month / year)

N/A

8. Is a statement of inventorship and of right to grant of a patent required in support of this request? (Answer 'Yes' if:

a) any applicant named in part 3 is not an inventor, or

b) there is an inventor who is not named as an applicant, or

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Continuation sheets of this form

Description

Claim(s)

Dstract

Drawing(s)

10. If you are also filing any of the following, state how many against each item.

Priority documents

Translations of priority documents

Statement of inventorship and right to grant of a patent (Patents Form 7/77)

Request for preliminary examination and search (Patents Form 9/77)

Request for substantive examination (Patents Form 10/77)

> Any other documents (please specify)

11.

I/We request the grant of a patent on the basis of this application.

Signature

WILLIAM JONES

10 MAY 1999

12. Name and daytime telephone number of person to contact in the United Kingdom

(01603) 624475 ANDRE CHISSEL

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IMPROVEMENTS IN AND RELATING TO TILING

Field of the Invention

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The present invention relates to improvements in and relating to tiling, in particular, to improvements in tiling guides and methods of tiling, given the improved tiling guide.

Background Art Known to the Applicant

The D.I.Y. enthusiast or the professional tiler is always faced, at the start of any tiling job, with the problem of placing the first tile "square-on" with respect to the walls and, for example, the lip of a bath

Similarly, when tiling a floor, or indeed, any other tilable surface, this initial "squaring" problem will always arise. Initially, the reader of this document would think that the problem of "squaring" could be overcome by simply placing the first tile in a corner. However, as no corner in any building has perfect 90° angles emanating from it, to start tiling in such a position would inevitably cause problems by the time the tiles had reached the diametrically opposite corner. That is why the thoughtful D.I.Y. enthusiast and the professional tiler will always start tiling away from a corner, hence the "squaring" problem.

Various solutions to this problem are known and in the case of the lip of a bath, it is always assumed (sometimes incorrectly) that the bath has been correctly levelled and as such, the first row of tiles are simply "butt-up" against the lip of the bath. Plumb-lines can also be used where there is no convenient horizontal or vertical marker

When tiling a floor, set-squares can be used.

Nevertheless, if there is not a surface that each tile in a particular row or column can "butt-up" against, the D.I.Y. enthusiast especially, could face the problem of a non-flush row or column of tiles being initially created. This would mean that any subsequent rows or columns or tiles that would "butt-up" against the first row or column will also be non-flush leading to an none ecstatically pleasing finish.

In essence, the laying of the first tile and the first row or column of tiles is all important when tiling a surface and none of the conventional solutions associated with establishing this first tile and first row/column of tiles overcome the problems as outlined above. At best, the D.I.Y. enthusiast will spend an inordinately lengthy amount of time establishing this first row or column of tiles whilst even the expert will experience some form of time delay.

The present invention seeks to overcome the problems as outlined above and provides a further solution to this age-old problem which will be of benefit to the D.I.Y. enthusiast and expert alike.

Summary of the Invention

According to a first aspect of the present invention, in its broadest aspect, there is provided a tiling guide to aid the fitment of tiles on to a surface, the guide comprising an elongate flat strip provided with fixing means, to secure the guide to a surface prior to the tiling of that surface and characterised by the provision of a shoulder, the shoulder being located on the upper in-use surface of the guide, and by the fact that the shoulder is of sufficient dimensions to enable an edge of a

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tile to "butt-up" against it without deforming when the guide is in use and by the feature that the guide -including the shoulder – is of sufficient dimensions that it can, in use, be completely obscured from view once the completed tiling has been conventionally grouted.

Preferably, the profile of the shoulder is such that it is not continuous throughout the length of the strip of the guide. Such an arrangement will minimise the amount of material required to produce any one particular guide.

Preferably, the guide in use, is angled.

Preferably, the angle subtended by the guide can be selected from the group comprising:

(A) 60°

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- (B) 45°
- (C) 90°
- (D) 120°.

Preferably, at least one end of the guide is provided with markings to enable one end of the guide to be cut away at a specific angle to enable other guides to contact the cut end at this particular angle.

Preferably, the fixing means comprises a pre-glued underside of the guide and a removable protective sheet, removal of the protective sheet from the guide prior use, exposing the pre-glued underside of the guide

Preferably, the location of the shoulder is substantially mid-way along the width of the guide.

Preferably, the guide is formed from plastics material.

The invention includes within its scope a tiling guide substantially as herein described with reference to and as illustrated in any appropriate selection or combination of the accompanying diagrams.

The invention further includes within its scope a pack of tiles incorporating a tiling guide of the type specified above.

According to a second aspect of the present invention there is provided a method of tiling comprising the steps of:

- 1. Establishing a vertical or horizontal line on or adjacent the surface to be tiled;
 - 2. Securing a tiling guide of the type specified herein above to the surface using the line created in step 1 as a guide; and
 - Tiling and subsequently grouting the surface, using the tiling guide in the manner described herein.

15 Brief Description of the Drawings

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Preferred embodiments of the invention will now be more particularly described by way of example only, with reference to the accompanying sheets of drawings wherein:

Figure 1 illustrates a perspective view of one embodiment of the present invention.

Figure 2 illustrates an end view of the embodiment illustrated in Figure 1 in use, once the completed tiling has been conventionally grouted.

Figure 3 illustrates a plan view of an alternative embodiment of the present invention that is capable of being fixed to a surface in a non-linear manner.

Figure 4 illustrates the underside surface of the embodiment illustrated in Figures 1 and 2 with the partial removal of a protective strip of material exposing a pregummed/glued-under-surface of the present invention.

Figure 5 illustrates a planned view of part of an alternative embodiment of the present invention showing a series of "grove-lines" at set at specific angles that can be cut away by for example a stanley knife to allow one strip of material to be place in contiguous relationship with another at a specified angle.

Figure 6 illustrates a side view of that which is shown in Figure 5 to emphasis the grooved-cut outs.

Figure 7 illustrates a further alternative embodiment of the present invention, an integral 90° strip in plan view

Figure 8 illustrates a further alternative embodiment of the present invention to emphasise a different type of cut-out.

Description of the Preferred Embodiments

Throughout the specification, the use of the word "integral" is intended to cover not only something which is formed from the outset as one single-entity component, but also anything which, whilst being assembled from a plurality of initially disparately-produced integers, ends up as one overall and normally non-dismountable structure.

Figure 1 illustrates a tiling guide to aid the fitment of tiles on to a surface and is generally referenced 1. The guide comprises an elongate substantially flat strip whose upper surface 2 is slightly bevelled and angled away from the lower surface. The centre of the guide 1 is provided with an integral shoulder 3 that is

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located on the upper surface 2 of the guide 1 and the shoulder 3 is continuous throughout its length. The top surface of the shoulder 3 is substantially parallel to the lower surface of the strip throughout its entire length.

Figure 2 shows how the guide 1 is used on a surface 5 when tiles 7 are applied and the Figure is generally referenced by the numeral 4. From Figure 2, it will become apparent that the shoulder 3 is of sufficient dimensions to enable an edge of a tile 7 to "butt-up" against it without the shoulder 3 deforming in any noticeable fashion when the guide 1 is in use. It will also become apparent from Figure 2 that the height of the shoulder 3 is substantially half the height of the thickness of the tile 7. Once conventional grouting 6 has taken place after the tiling has been completed, the reader can then see immediately that the remaining gap between the top of the tiles 7 and the top of the shoulder 3 in Figure 2, has been in-filled with grout 6 to completely obscure from view, the tile guide 1.

In an alternative embodiment, as illustrated in Figure 3 and generally referenced 9 the elongate flat strip has a series of cut-outs along its length leaving only small areas 8 of the strip with fixing holes 10 to enable the guide to be screwed or hammered on to a surface. The cut-outs enable a degree of flexibility denoted by the arrows "A" when securing the guide to a surface. Therefore, the shoulder 3 need not necessarily be in the form of a substantially linear "butting-up" surface and could allow for curved tiles (or tiles cut into the curved shape) to fit the curved shoulder 3 created.

Figure 4 illustrates another means of fixing the guide 1 to a surface 5 prior to the tiling of that surface 5. In the embodiment illustrated in Figure 4, the substantially flat elongate strip is provided with a peelable strip of paper of the type generally known per se which can be removed from the guide 1 to expose a pre-gummed or otherwise pre-glued surface 12 to enable the guide 1 to be stuck to the surface 5. This obviates the need for a plurality of counter-sunk apertures running the length of the guide 1, either side of the shoulder 3.

Figure 5 illustrates part of a further alternative embodiment generally referenced 13, wherein at least one end of the guide 1 is provided with markings 14, in this case a series of straight, grooved-cut outs 14 set at specific angles to the

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longitudinal access of the shoulder 3, most notably 45° and 60°. Placing a cutting implement, for example a Stanley knife, junior hacksaw blade etc along the grooves 14 and sawing along the grooves 14 will result in a new, cut guide 1, that can be placed adjacent or in otherwise contiguous contact with another guide 1 (cut or uncut), to enable tiles cut at the angle subtended by the two guides 1, 1 to be slid and "butted-up" into place.

Figure 7 illustrates an integral angled guide generally referenced 15, wherein the guide is set at a 90° angle.

Alternative non-illustrated embodiments of the present invention will now be described which denote depart from the scope of the present invention. For instance, the shoulder 3 need not necessarily be continuous or substantially parallel throughout its length. The shoulder 3 could be provided with a number of cut-outs that could for example, result in a sloping top edge, or a curved or fluted top edge.

The angled upper in use surface 2 of the guide 1as shown in Figure 1, is so angled to allow grout 6 to occupy as much of the top surface 2 of the guide 1 in use as is possible (see Figure 2). Alternatively, the upper in use surface 2 could be provided with a number of ribbed or grooved cut-outs running along the longitudinal length of the guide 1 to enable grout 6 to essentially, "key-in" to the guide 1.

The edge of the shoulder 3 that the tile 7 "butts-up" against in use need not necessarily be flat as illustrated in the Figures and could also incorporate a number of ribbed or grooved cut-outs to aid the keying in of grout 6. In one embodiment, it can be envisaged that the shoulder when seen end on (as illustrated in Figure 2) could be "T" shaped (instead of a single vertical line) enabling grout 6 to fill the gaps separating the head of the "T" from the stem of the "T".

The angle subtended by the guide 1 in Figure 7 need not necessarily be 90° and could for example be selected from the group comprising 60°, 45°, 90° and/or 120°. Furthermore, these angles could also apply to the markings 14 illustrated in

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Figure 5, thus enabling a non-integral pair of guides 1 to achieve the same end result as the integral guide generally referenced 15 illustrated in Figure 7, ie that of a fixed angle.

When using a guide of the type herein described, one could initially use a plumb-line to establish a straight line on a wall. Then one would secure the guide to the wall using the plumb-line as a guide and then one would start tiling in the manner described herein. Alternatively, the plumb-line could be used to cast a shadow on the wall and a vertical line drawn with a pencil on to the wall to help the placement of the guide. A set square could be used on a similar manner on a floor that needed to be tiled.

For the avoidance of doubt, the term grouting is intended to include conventional grouting and "in-fill" with sand/dirt brushed into place with a broom for patio type tiling as demonstrated by the "ground-force" team on BBC television. Similarly a tile is intended to include paving slabs.

Furthermore, in alternative embodiments, the upper in use surface of the shoulder 3 could also be ribbed or otherwise provided with a number of cut outs to also aid the keying in of the grout 6. Furthermore, in alternative embodiments (see Figure 8)

Furthermore, again in alternative embodiments not illustrated, the guide 1 can be provided with a pair of parallel grooved cut outs running the length of the guide 1 each respective one of the pair of grooved cut outs being adjacent the shoulder 3, the pair being located on either side of the shoulder 3 so that the shoulder could be cut away with the aid of a stanley knife by simply running the stanley knife down the longitudinal axis of the guide 1 along the length of the cut out adjacent the shoulder.

The guide 1 can be made from plastics material, preferably a thermoplastic plastics material for example, it could be extruded from a mould. The guide 1 could be so pliable that when it is not in use, eg packed for sale, it need not necessarily be sold in lengths like "Dado-Rails", because of the pliable nature of the plastics material used, the length of the guide 1 could be rolled up into a spiral,

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the axis of the spiral being perpendicular to the longitudinal axis of the guide. Such a spiral of material could be sold in conventional see through plastics cartons. Or sold with boxes of tiles as an additional feature. Furthermore, instead of selling the guides 1 in rolled up spirals, there is nothing to stop them being sold in very short lengths, each respective end of each respective length being provided with some type of male-female interference type fit so that each respective length can be "clipped" together to form one long strip.

CLAIMS

- 1. A tiling guide to aid the fitment of tiles on to a surface, the guide comprising an elongate flat strip provided with fixing means, to secure the guide to a surface prior to the tiling of that surface and characterised by the provision of a shoulder, the shoulder being located on the upper in-use surface of the guide, and by the fact that the shoulder is of sufficient dimensions to enable an edge of a tile to "butt-up" against it without deforming when the guide is in use and by the feature that the guide including the shoulder - is of sufficient dimensions that it can, in use, be completely obscured from view once the completed tiling has been conventionally grouted.
- 2. A tiling guide as claimed in Claim 1 characterised in that the profile of the shoulder is such that it is not continuous throughout the length of the strip of the guide. Such an arrangement will minimise the amount of material required to produce any one particular guide.
- 3. A tiling guide as claimed in Claim 1 or Claim 2 characterised in that the guide in use, is angled.
- 4. A tiling guide as claimed in any of the preceding Claims characterised in 20 that the angle subtended by the guide can be selected from the group comprising: 60°, 45°, 90°, 120°.
 - 5. A tiling guide as claimed in any of the preceding Claims characterised in that at least one end of the guide is provided with markings to enable one end of the guide to be cut away at a specific angle to enable other guides to contact the cut end at this particular angle.

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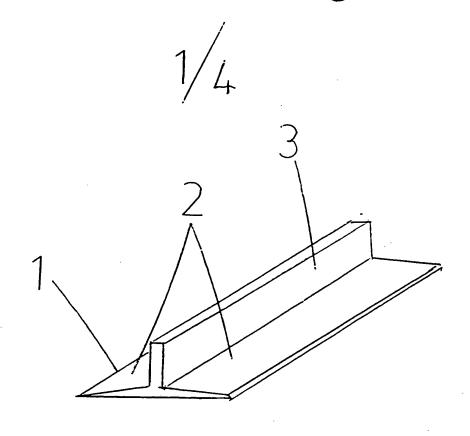
- A tiling guide as claimed in any of the preceding Claims characterised in that the fixing means comprises a pre-glued underside of the guide and a removable protective sheet, removal of the protective sheet from the guide prior use, exposing the pre-glued underside of the guide.
 - 7. A tiling guide as claimed in any of the preceding Claims characterised in that the location of the shoulder is substantially mid-way along the width of the guide.
- 10 8. A tiling guide as claimed in any of the preceding Claims characterised in that the guide is formed from plastics material.
 - 9. A tiling guide substantially as herein described with reference to and as illustrated in any appropriate selection or combination of the accompanying diagrams.
- 15 A pack of tiles incorporating a tiling guide of the type claimed above.
 - 11. A method of tiling comprising the steps of:

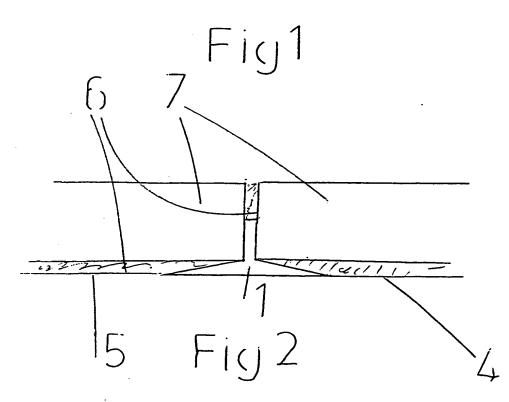
- 1. Establishing a vertical or horizontal line on or adjacent the surface to be tiled;
- 2. Securing a tiling guide of the type specified herein above to the surface using the line created in step 1 as a guide; and
- 3. Tiling and subsequently grouting the surface, using the tiling guide in the manner described herein.
- 12. A method substantially as herein described with reference (where applicable) to the accompanying figures.

ABSTRACT

IMPROVEMENTS IN AND RELATING TO TILING

A tiling guide to aid the fitment of tiles on to a surface, the guide comprising an elongate flat strip provided with fixing means, to secure the guide to a surface prior to the tiling of that surface and characterised by the provision of a shoulder, the shoulder being located on the upper in-use surface of the guide, and by the fact that the shoulder is of sufficient dimensions to enable an edge of a tile to "butt-up" against it without deforming when the guide is in use and by the feature that the guide -including the shoulder – is of sufficient dimensions that it can, in use, be completely obscured from view once the completed tiling has been conventionally grouted.





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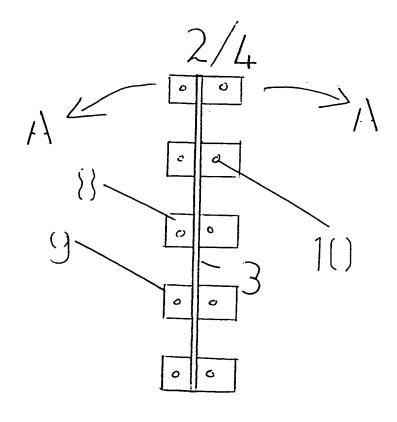
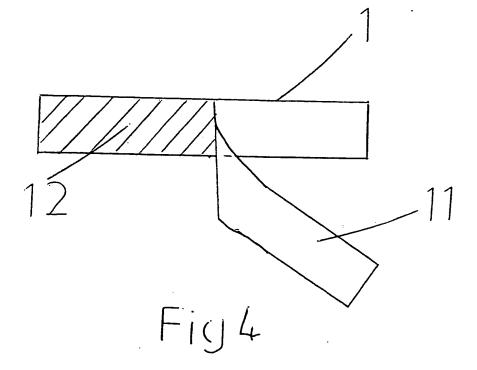
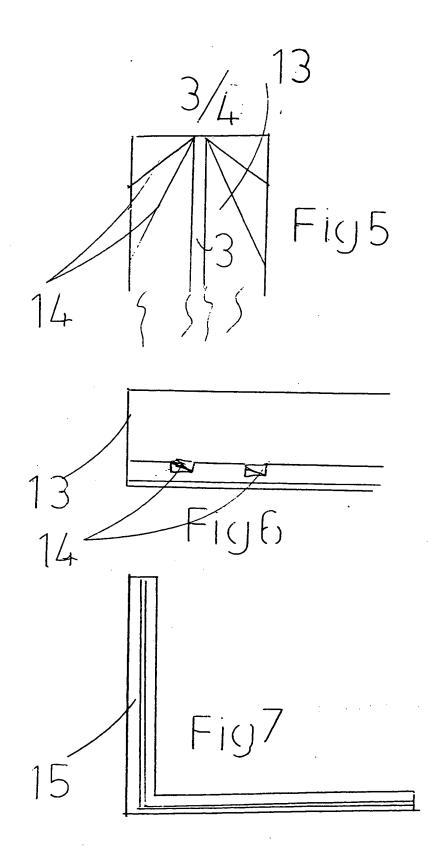


Fig3



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4/4

Fig

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